

WHAT IS CLAIMED IS:

1. A semiconductor integrated circuit device comprising:

a logic circuit including a plurality of areas, each of the areas including at least a first MOS transistor of a first conductivity type;

first and second power supply lines to supply the logic circuit with a supply voltage;

first substrate bias voltage supply line;

a substrate bias control circuit including a plurality of second MOS transistors of the first conductivity type, at least one of the second MOS transistor being provided to each of the areas;

wherein a source of the first MOS transistor is coupled to the first power supply line, a drain of the first MOS transistor is coupled to the second power supply line and a body of the first MOS transistor is coupled to the first substrate bias voltage supply line;

wherein a source-drain path of each of the second MOS transistor is coupled between the first power supply line and the first substrate bias voltage line; and

wherein when the supply voltage is activated, the plurality of the second MOS transistors are controlled to be ON state.